



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

140 WEST FLAGLER STREET, SUITE 1603

MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

www.miamidade.gov/buildingcode

NOTICE OF ACCEPTANCE (NOA)

Dorma Automatics, Inc.
924 Sherwood Drive
Lake Bluff, IL 60044

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "ESA 200" Aluminum Automatic Sliding Glass Door (O-Sx-Sx-O) w/ Breakout

APPROVAL DOCUMENT: Drawing No. **05-DOA-0002**, titled "ESA 200 Series Automatic Sliding Glass Doors (Large Missile-Impact Resistant)", sheets 1 through 4 of 4, prepared by Engineering Express, dated 05/09/06, and last revised on 08/10/09, signed and sealed by Frank L. Bennardo, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

Limitation: 1. Fixed panel top Rails to be secured with #10x 3/4" SMS @6" OC at Head and bottom Rail with #10x 3/4" SMS @6" OC at bottom guide.

2. Electrical devices are not part of this approval and must be reviewed by corresponding authority.

3. See applicable Design Pressure rating per glazing type B, C or D.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 06-0518.02 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**

MIAMI-DADE COUNTY
APPROVED

NOA No 09-0415.04
Expiration Date: February 11, 2012
Approval Date: October 07, 2009
Page 1

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9/14/19

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- A. DRAWINGS** (*Transferred from NOA# 06-0518.02*)
1. Manufacturers die drawings and sections.
 2. Drawing No. **05-DOA-0002**, titled "ESA 200 Series Automatic Sliding Glass Doors (Large Missile-Impact Resistant)", sheets 1 through 4 of 4, prepared by Engineering Express, dated 05/09/06, and last revised on 08/10/09, signed and sealed by Frank L. Bennardo, P.E.
- B. TESTS** (*Transferred from NOA# 06-0518.02*)
1. Test reports on 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94 (Not Performed)
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94
- Along with marked-up drawings and installation diagram of an automatic aluminum Sliding Glass Door, prepared by Hurricane Test Laboratory, LLC, Test Report No(s). **HTL-0357-0107-06** (Sp#1 &2) dated 01/04/06-03/30/07 and **HTL-0357-0605-05** (Sp#1, 2 &3) dated 08/25/05-09/20/05, signed & sealed by Vinu J. Abraham, P.E.
- C. CALCULATIONS**
1. Anchor Verification Calculations, complying w/ FBC-2007, dated 01-26-2009 and last revised on 08/10/09, prepared, signed and sealed by Frank L. Bennardo, P. E.
 2. Glazing complies with ASTM E-1300-02 &-04
- D. QUALITY ASSURANCE**
1. Miami Dade Building Code Compliance Office (BCCO).
- E. MATERIAL CERTIFICATIONS**
1. Notice of Acceptance No. **08-0520.08** issued to issued to Solutia Inc., for "Vanceva Composite Glass Interlayer", expiring on 12/11/2013.
 2. Notice of Acceptance No. **04-0818.01** issued to E.I. DuPont DeNemours, for "Sentry Glass ® 457", expiring on 01/13/2010.
- F. STATEMENTS**
1. Statement letter compliance to FBC-2007, dated April 08, 2009, signed by Frank L. Bennardo, P. E.
 2. Statement letter of "No financial interest" dated 05/09/06, as part of file # 06-0518.02.
 3. Statement of lab compliance, as part of the above referenced test report.
- G. OTHER**
1. This NOA revises NOA # **06-0518.02**, expiring February 11, 2012.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No 09-0415.04
Expiration Date: February 11, 2012
Approval Date: October 07, 2009

ESA 200 AUTOMATIC SLIDING GLASS DOOR

LARGE MISSILE IMPACT RESISTANT - PARTIAL BREAKOUT

FRANK L. BENNARDO, P.E.
PE0046549

08/10/2009

ENGINEERING EXPRESS®
160 SW 12th AVENUE, #106
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Ph: (954) 354-0660 Fax: (954) 354-0443
WWW.ENGINEERINGEXPRESS.COM
A FRANK L. BENNARDO, P.E., INC. INNOVATION

DORMA AUTOMATICS
924 SHERWOOD DRIVE
LAKE BLUFF, ILLINOIS 60044
WWW.DORMA-USA.COM
ESA 200 SERIES
AUTOMATIC SLIDING GLASS DOORS
(LARGE MISSILE IMPACT RESISTANT)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	AML	CL	05/09/06
BCCO COMMENTS	AML	CL	11/06/06
2007 FBC	RKB	CL	01/16/08

05-DOA-0002

SCALE: N.T.S. 01

PAGE DESCRIPTION:

1

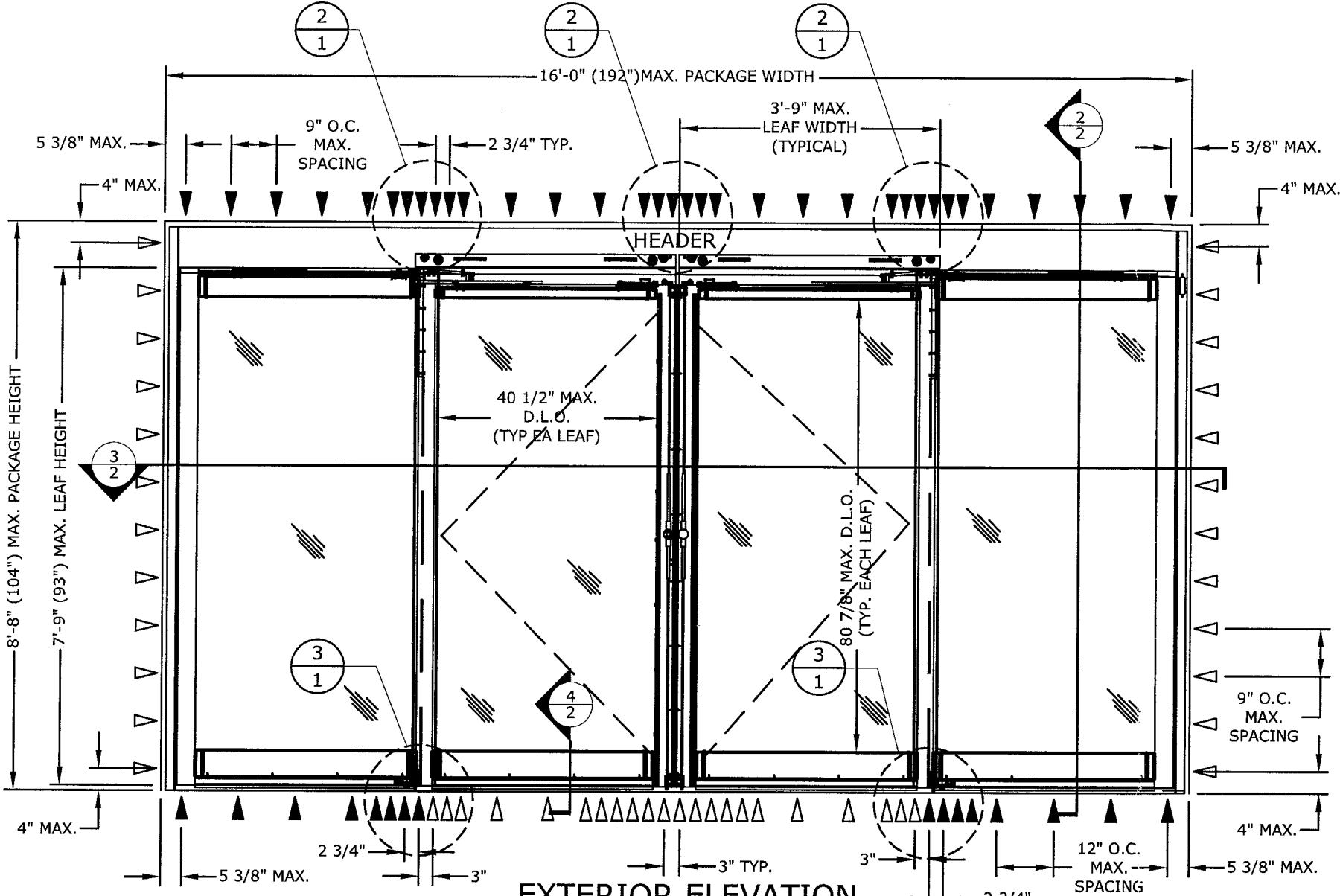
DESIGN PRESSURE RATING

	WHERE WATER INFILTRATION REQUIREMENT IS NEEDED.	WHERE WATER INFILTRATION REQUIREMENT IS NOT NEEDED.
GLAZING TYPES	"B", "C" OR "D" *	"B" * "C" OR "D" *
POSITIVE	NOT APPROVED	+ 45.0 PSF + 52.4 PSF
NEGATIVE	NOT APPROVED	- 45.0 PSF - 52.4 PSF

* SEE GLAZING SCHEDULE ON SHEET "2"

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED & DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2007 FLORIDA BUILDING CODE - HIGH VELOCITY HURRICANE ZONE (HVHZ) - AND HVHZ TEST PROTOCOL TAS 201, 202 & 203 AS LARGE MISSILE IMPACT RESISTANT SYSTEM.
2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. POSITIVE & NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE.
4. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. WHERE SITE CONDITIONS DIFFER FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
5. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND ADDITIONAL IMPOSED LOADS. WOOD BUCKS NOT BY THIS PRODUCT MANUFACTURER SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE HOST STRUCTURE.
6. THE PRODUCT DETAILED HEREIN HAS BEEN DESIGNED AND TESTED TO THE MAXIMUM SPANS & LOADS SHOWN ON THESE DRAWINGS.
7. ALL ALUMINUM EXTRUSIONS ARE 6063-T5 OR 6063-T6 ALUMINUM.
8. ALL UNITS ARE LARGE MISSILE IMPACT RESISTANT AND DO NOT REQUIRE IMPACT RESISTANT SHUTTERS FOR ALL EXTERIOR DOOR INSTALLATIONS.
9. ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, SPACED AS NOTED HEREIN. ANCHOR EMBEDMENT TO BASE MATERIAL DOES NOT INCLUDE WALL DRESSING OR STUCCO.
10. ALL BOLTS & WASHERS SHALL BE ZINC COATED, GALVANIZED, OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 KSI, EXCEPT INSTALLATION ANCHORS.
11. ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR COATED.
12. STRUCTURAL SILICONE ADHESIVE IS APPLIED ATOP OF HEADER, JAMBS, AND BELOW SIDE GUIDE, SPACER, AND THRESHOLDS.



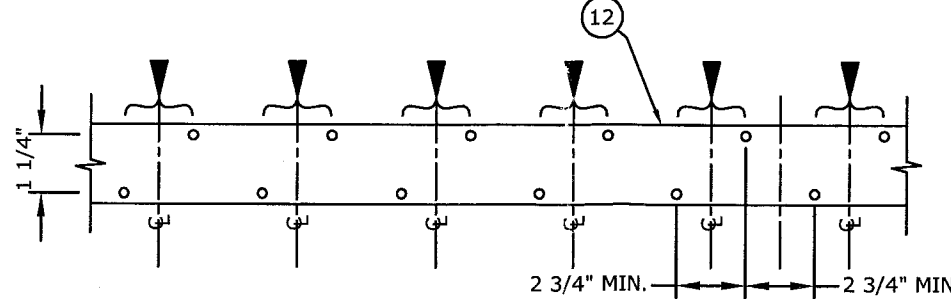
EXTERIOR ELEVATION

1 0-SX-SX-0 (CONFIGURATION)
1 N.T.S. ELEV.

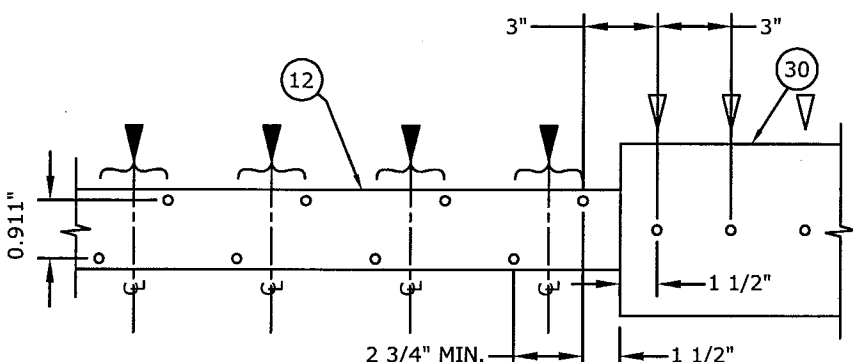
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 09-0415-04
Expiration Date FEB 11, 2012
By Ismael L. Chaudhry
Miami Dade Product Control
Division

ANCHOR LEGEND:

- ▽ INDICATES SINGLE ANCHOR (INLINE)
- ▼ INDICATES STAGGERED PAIR OF ANCHORS (CENTERLINE SHOWN ON ELEVATION)



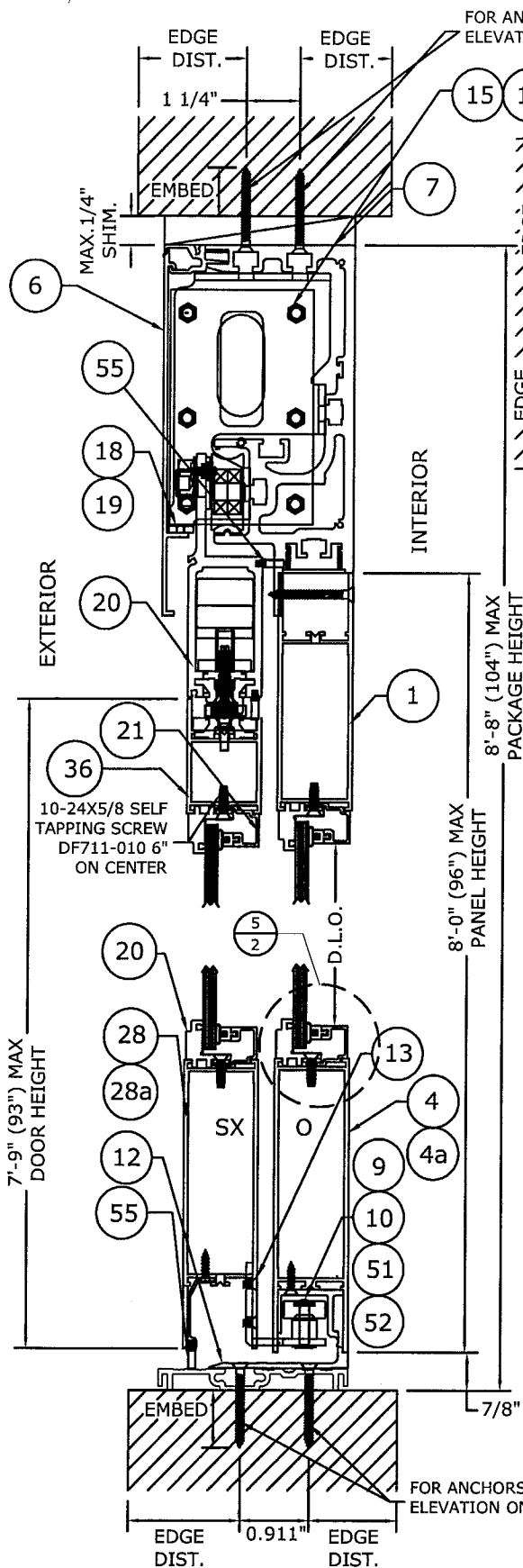
2 HEAD CLUSTER
1 N.T.S. PLAN VIEW



3 SILL CLUSTER
1 N.T.S. PLAN VIEW

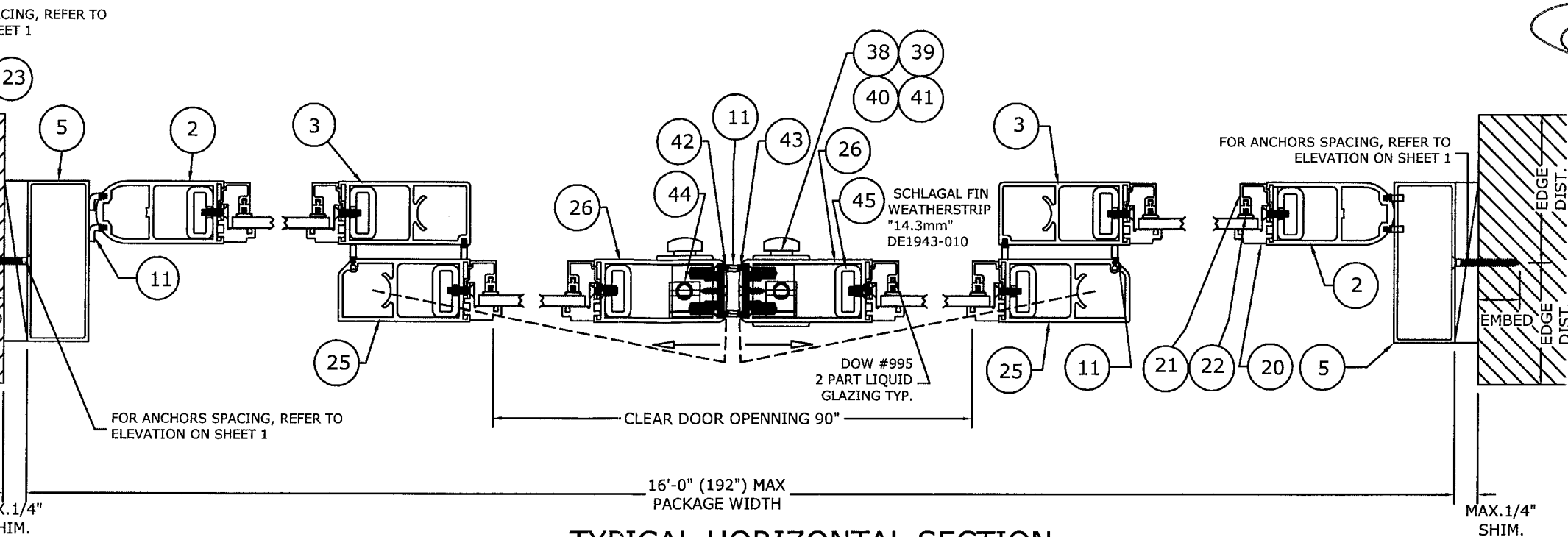
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08/10/2009 - 4:23pm rbarlett



**TYPICAL VERTICAL SECTION
(SHOWN IN OPEN POSITION)**

2 N.T.S. VERT. SECTION



TYPICAL HORIZONTAL SECTION

0-SX-SX-0 (CONFIGURATION)

3 N.T.S. HORIZ. SECTION

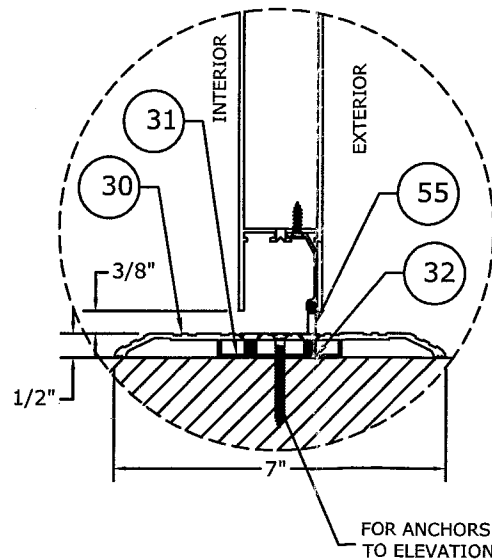
ANCHOR SCHEDULE:

- 1/4" ITW TAPCONS WITH 1 3/4" MIN. EMBED. INTO MIN. 3000 PSI CONCRETE.
- 1/4" GRADE 5 METAL SCREWS TO A36 STEEL OR MIN. 6063-T5 ALUM. ALLOY (1/8" MIN. THICK)
- 1/4" GRADE 5 METAL SCREWS WITH 1 1/2" MIN. THREAD PENETRATION TO WOOD, 1" MIN. EDGE DISTANCE (FOR 2X WOOD BUCK ONLY)

ANCHOR NOTES:

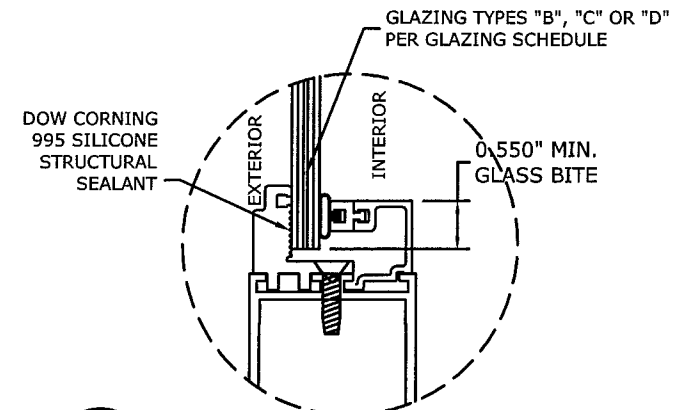
- SEE EXTERIOR ELEVATION FOR ANCHOR LOCATIONS AND/OR SPACING.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- ENSURE MINIMUM 2-1/2" EDGE DISTANCE FOR ALL ANCHORS TO CONCRETE. EDGE DISTANCE OF 1/2" IS ACCEPTABLE FOR ANCHORS TO STEEL OR ALUMINUM.
- WOOD HOST STRUCTURE SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 09-0415-014
Expiration Date FEB 11, 2012
By Ismael L. Chane
Miami Dade Product Control
Division



BI-PART THRESHOLD

4 N.T.S. VERT. SECTION



GLAZING DETAIL

5 N.T.S. DETAIL

GLAZING SCHEDULE:

- 1/4" HS - 0.045 DUPONT BUTACITE PVB INTERLAYER - 0.007" DUPONT ABRASION-RESISTANT POLYESTER
- 1/8" HS - 0.075 Solutia VANCEVA INTERLAYER - 1/8" HS
- 1/4" HS - 0.075 Solutia VANCEVA INTERLAYER - 1/4" HS

08/10/2009

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A FRANK L. BENNARDI, P.E., INC. INNOVATION

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(LARGE MISSILE IMPACT RESISTANT)

REMARKS	DATE	DRWN	CHKD
INIT ISSUE	05/09/06	AMIL	CL
BCCO COMMENTS	11/06/06	AMIL	CL
2007 FBC	01/16/08	RKB	CL

05-DOA-0002

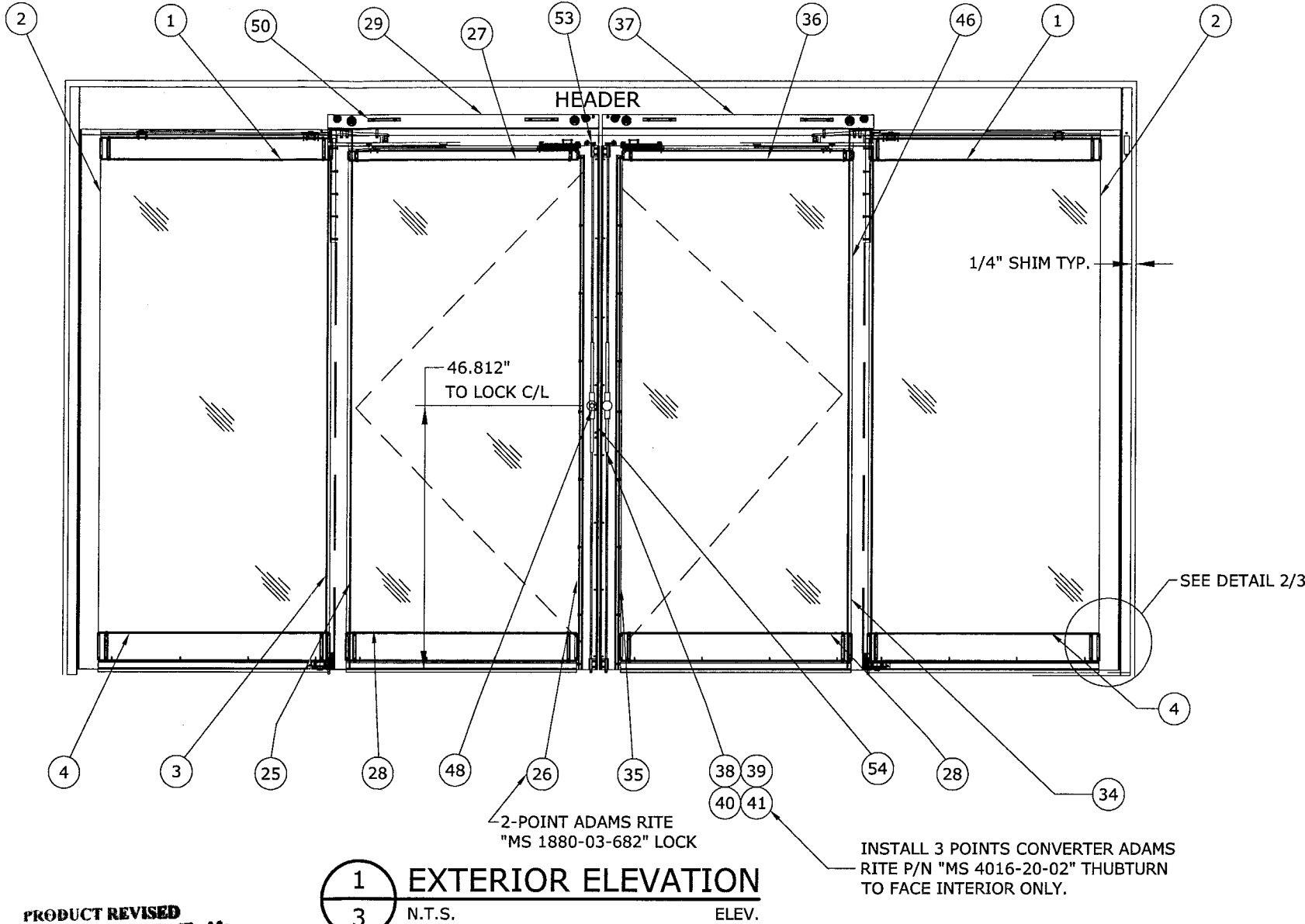
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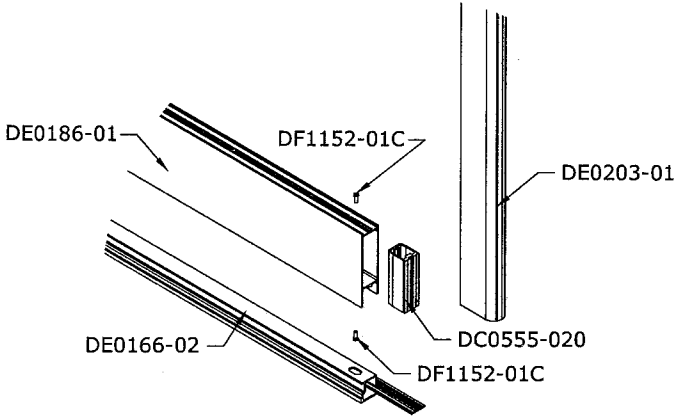
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BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	MATERIAL	QTY
1	DE0163-01	O TOP RAIL PANEL		2
2	DE0203-01	O PIVOT RAIL		2
3	DE0202-01	O INTERLOCK RAIL		2
4	DE0186-01	O BOTTOM RAIL PANEL		2
4a	DE0187-02	9 1/4" ALTERNATE O BOTTOM RAIL PANEL		2
5	DE0200-01	JAMB DOUBLE POCKET		1
6	DE0158-03	HEADER FACEPLATE		1
7	DE0155-04	HEADER		1
8	DE0159-02	HEADER ADAPTER		1
9	DS1894-010	O-SX BOTTOM GUIDE BRACKET PIVOT ASSEMBLY		1
10	DS1893-010	SX-O BOTTOM GUIDE BRACKET PIVOT ASSEMBLY		1
11	DE2212-020	WEATHERSTRIP "13.4mm"		8
12	DE0166-020	BOTTOM GUIDE TRACK		1
12a	DE0209-01	BOTTOM GUIDE RECESSED TRACK		1
13	DF0394-01A	1/4-20X1/2 UNC PHILPS FLAT MS CLEAR		8
14	DC2185-010	SIDE CARRIER		2
15	DC1498-010	HEADER BACK BLOCK		2
16	DF0728-01Z	1/4-20X1" HX-HD MS GR5 ZINC		10
17	DF0939-01Z	A6.4(M6) SPRING WASHER ZINC		10
18	DC0831-010	COVER HOLDING BAR		1
19	DF0999-01Z	10-24X3/4" PH FL HD UNC ZINC		4
20	DE1767-010	GLASS STOP EXT. (6063-T5)		1
21	DE0210-010	GLASS STOP 1/4" SNAP INT. (6063-T5)		1
22	DE0148-020	GLAZING BEAD CO-EXTRUSION		1
23	DF0385-010	RIVET NUT 1/4-20 SF UNC IFC STEEL		10
25	DE0215-01	SX PIVOT RAIL		1
26	DE0201-02	VERTICAL LOCK RAIL		2
27	DS1736-010	SX TOP RAIL ASSEMBLY		1
28	DE0188-01	SX BOTTOM RAIL ASSEMBLY		2
28a	DE0187-02	9 1/4" ALTERNATE SX BOTTOM RAIL ASSEMBLY		2
29	DS1724-010	CARRIER ASSEMBLY		1
30	DE0246-01A	THRESHOLD BI-PART (MACHINED)		1
31	DC0837-010	BOTTOM PLATE		1
32	DF0848-01Z	1/4-20X1/2 FL HD SOC SC ZINC		4
34	DS1735-010	SX PIVOT ASSEMBLY		1
36	DE0162-020	SX TOP RAIL PANEL		1
37	DS1833-010	CARRIER ASSEMBLY		1
38	DC0572-00A	LOCK CYLINDER RING CLEAR/DC0572-00B		1
39	DC0571-00A	KEY LOCK CYLINDER -CLEAR/ DC0571-00B		1
40	DC0621-00A	THUMB KEY-CLEAR/ DC0621-00B-DARK BRONZE		1
41	DC2057-010	3 POINTS CONVERTER ADAMS RITE P/N "MS 4016-20-02"		1
42	DC1766-010	ASTRAGAL- L.H		1
43	DC1701-010	ASTRAGAL- R.H		1
44	DC1497-010	LATCH BLOCK		4
45	DC1700-010	PUSH BAR		2
46	DS1730-010	O-INTERLOCK RAIL ASSEMBLY		1
48	DC2055-010	2 WAY BOLT ADAMS RITE P/N "MS 1880-03-682"		1
50	DC0838-010	ANTI-DERAIL BLOCK		4
51	DC0958-010	SX BOTTOM GUIDE ROLLER WHEEL		2
52	DF1248-010	M6X20 BUTTON CAP SCREW		2
53	DC1978-01Z	BREAKOUT STOP		2
54	DC2492-01Z	CATCH PLATE		1
55	DE0152-120	BRUSH		8



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By Ishag I. Ghandi
Miami Dade Product Control
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2 CORNER DETAIL
3 N.T.S. ELEV.

FRANK L. BENNARDO, P.E.
#PE0046549

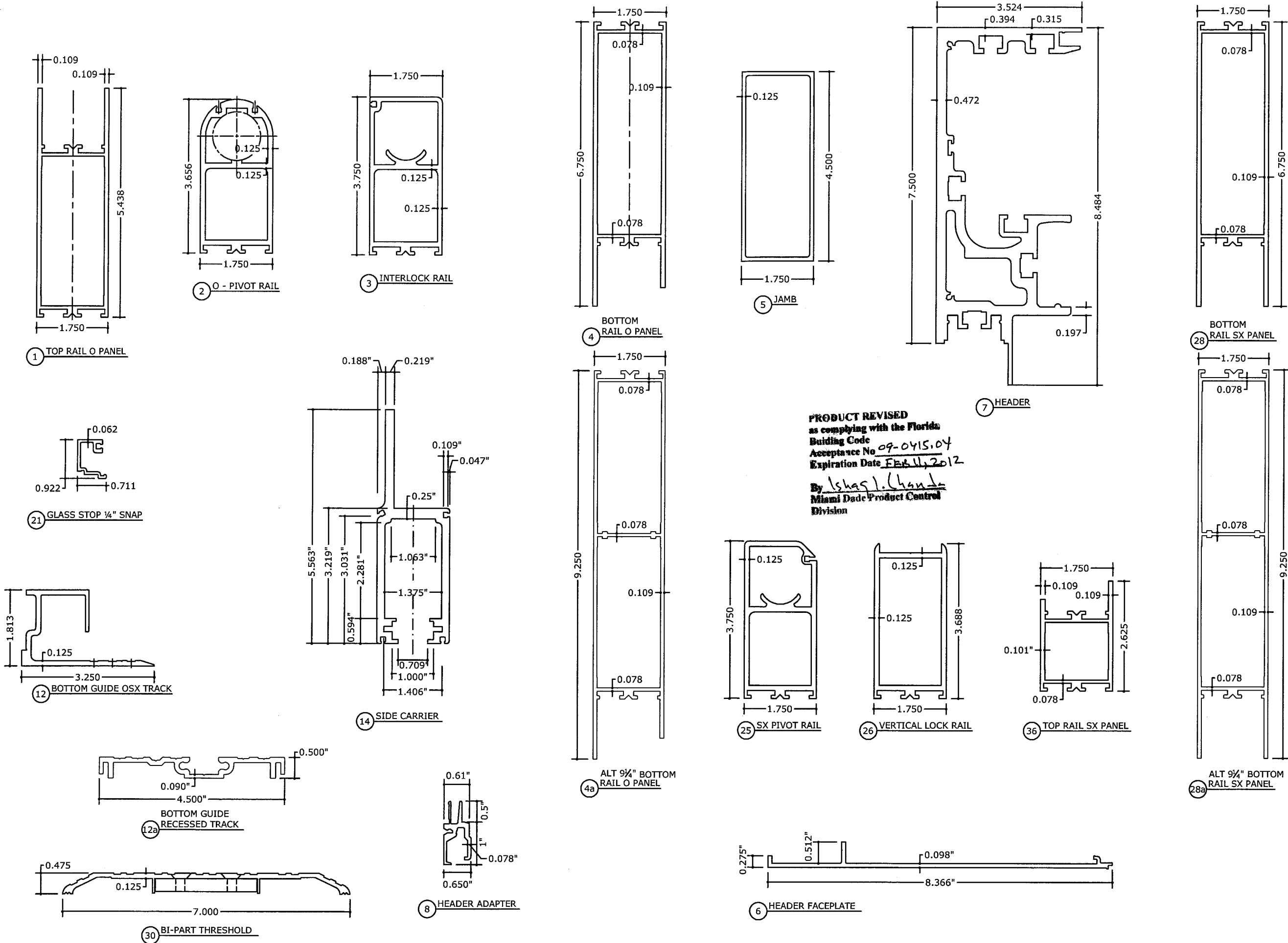
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05-DOA-0002
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